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REMARKS

The following remarks are submitted responsive to the Office Action, dated June 28, 2005, rejecting pending claims 24-26. No amendments to the pending claims are proposed herein. The pending claims are Claims 24-26, as previously presented. The Examiner's rejections are addressed separately below.

Information Disclosure Statement

A Supplemental Information Disclosure Statement is being filed concurrently herewith to include the month and year of the publications indicated by the Examiner as not being considered.

Rejections under 35 U.S.C. § 103

Claims 24-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 01/41512 ("*Thompson*") in view of the article by Djurovich et al., Polymer Preprints 41(1), 2000, pp. 770-771 ("*Djurovich*"). Applicants respectfully traverse this rejection for the reasons stated below. In sum, whether read alone or together, neither *Thompson* nor *Djurovich* teach or suggest the subject matter of the pending claims.

Claims 24 and 25

It is respectfully submitted that *Thompson* does not teach or suggest compounds having the specific phenylquinoline or phenylisoquinoline ligands recited in Applicants' Claims 24 and 25. While *Thompson* discloses devices having an emitting layer comprising a compound L_2MX , where L and X are bidentate ligands and M is an octahedral metal, such as iridium, and further discloses that the L ligand can have a phenylisoquinoline structure, which is labelled as "arylquinoline", in Figure 39, such is not the subject matter of pending Claims 24 and 25. At best, *Thompson* indicates the possibility of substituents on the aromatic rings of the "arylquinoline" ligand in Figure 39. However, there is no teaching as to what these substituents could or should be. Moreover, there is no teaching or suggestion of the phenylquinoline ligands of Claims 24 and 25.

Djurovich does not complete the deficiencies of the *Thompson* reference. *Djurovich* teaches only one compound, an iridium complex having three phenylpyridine ligands, substituted with fluorine ("FIrppy"). The Examiner further stated that it would have been obvious to use the fluorine of FIrppy as the substituents on the "arylquinoline" ligand of *Thompson* in order to improve the solubility. Applicants respectfully disagree with this assessment. The ligand of the *Djurovich* complex is a phenylpyridine, not a phenylquinoline or phenylisoquinoline. While *Djurovich* indicates that the substitution of fluorines on the phenylpyridine ligand increases the solubility of the complex in organic solvents, the

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reference also indicates that the emission efficiency is decreased. See *Djurovich* at paragraph bridging pages 770 and 771. Based on the lower efficiency and the fact that the ligands of Claims 24 and 25 are chemically different in *Djurovich*, it is respectfully submitted that one of ordinary skill would not have chosen fluorine as a substituent on a phenylquinoline or phenylisoquinoline ligand. The Examiner noted that *Thompson* and *Djurovich* are common inventor/authors on the two references. Applicants submit that the common inventership/authorship is evidence that the combining of *Thompson* and *Djurovich* actually teaches away from the subject matter of Claims 24 and 25. Specifically, the *Thompson* reference teaches away from use of fluorine substituents. Since both *Thompson* and *Djurovich* were aware of fluorine as a possible substituent in the world of general chemistry, if it was in any way of interest to them, such a substituent would have mentioned it if it were suitable for the "arylquinoline" ligand of *Thompson*. The failure to list fluorine as a substituent is an indication to one of ordinary skill against its use. Furthermore, neither reference teaches or suggests trifluoromethyl substituents on any type of ligand.

Applicants respectfully request that this rejection be withdrawn with respect to Claims 24 and 25.

Claim 26

The Examiner stated that it would have been obvious to use greater than 20% by weight of the iridium complex in the light-emitting layer of *Thompson* in order to increase the total amount of light emitted. Applicants respectfully disagree with this conclusion. *Thompson* does not teach a range of concentrations for an iridium complex in a light-emitting layer. *Thompson* discloses one data point: a device in which the light-emitting layer is 12% by weight bis(2-phenylbenzothiazole)iridium acetylacetonate ("BTIr") in 4,4'-N,N'-dicarbazole-biphenyl. The BTIr complex does not have a ligand with Applicants' structure (XI) or (XII) as recited in Claim 26. *Djurovich* teaches that devices with maximum efficiency are obtained with FIrppy concentrations in the range of 2.5-3.5 wt% (see last paragraph on page 771). Again, the FIrppy complex does not have a ligand with Applicants' structure (XI) or (XII) as recited in Claim 26, nor does it have the ligand in the BTIr complex of *Thomson*.

Consequently, the neither the *Thompson* nor *Djurovich* reference, whether read individually or collectively, teach or suggest the concentration range for iridium complexes having a ligand with Applicants' structure (XI) or (XII) as recited in Claim 26. If anything, the combined references teach that the concentration of an iridium complex in a light-emitting layer should be 12 wt% or lower, a teaching away from the subject matter of Claim 26.

Applicants respectfully request that this rejection be withdrawn with respect to Claim 26.

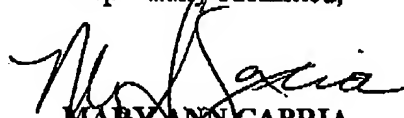
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Conclusion

In view of the foregoing remarks, Applicants submit that the above referenced pending application is in condition for allowance. A Notice of Allowance for Claims 24-26 is earnestly solicited.

Respectfully submitted,



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